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Receiving, Handling, and Storage of Specimens for Long-Term Corrosion Testing

Greg Gdowski

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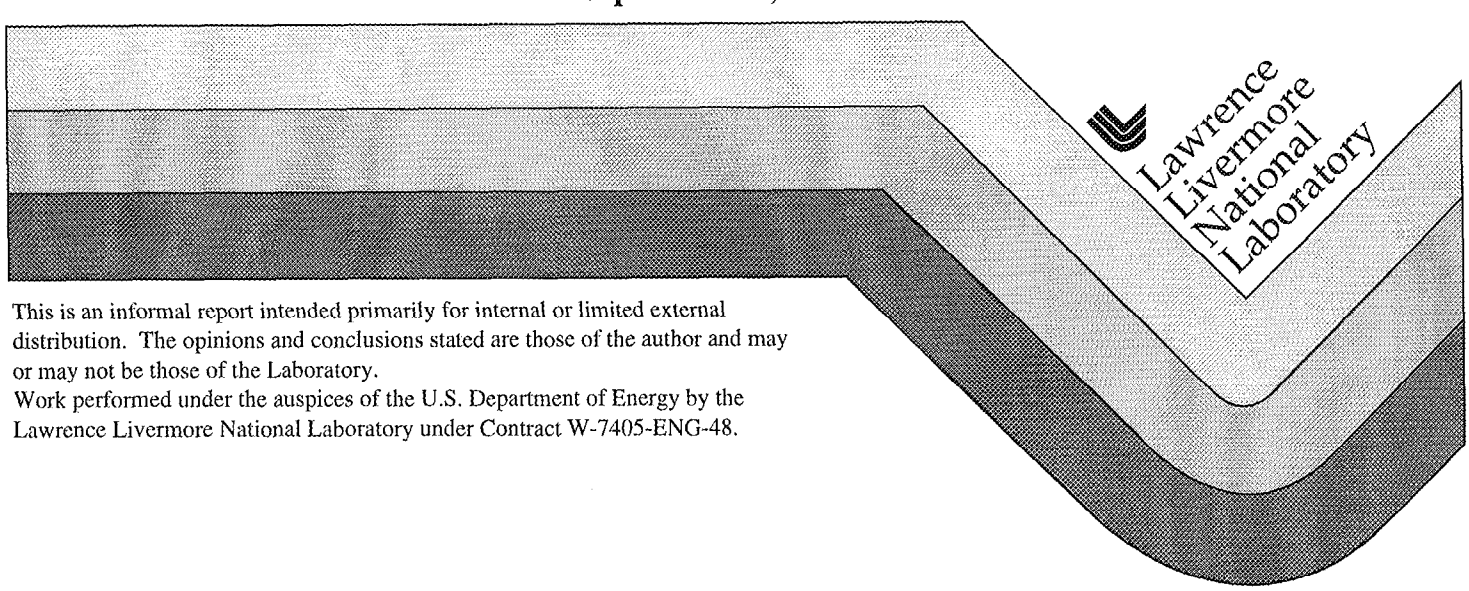

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YUCCA MOUNTAIN PROJECT

Technical Implementing Procedure

No.:	TIP-CM-02
Revision:	0
Effective Date:	
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Subject: Receiving, Handling, and Storage of Specimens for Long-Term Corrosion Testing

AUTHOR: G. Gdowski

Training Required: Yes ■ No □

Comments: Training required for personnel performing work to this TIP.

REVISION HISTORY

Rev. No.	CN No.	Effective Date	Description of Revision/CN
0		10/11/95	Initial Issue

Approved by: _____ 9/19/95
Yucca Mountain Project Leader — Date

Approved by: _____ 12 Sept '95
YMP Quality Assurance Manager — Date

Approved by: _____ 18 Sept 1995
Technical Area Leader — Date

1.0 PURPOSE

The purpose of this TIP is to describe the procedures that will be followed in order to ensure that the test specimens for Activity E-20-50, "Long-Term Corrosion Studies" are received, handled, and stored in a manner in which they are not damaged, degraded, or lost. This TIP was written to comply with LLNL YMP procedure 033-YMP-QP 13.0, "Handling, Storage, and Shipping."

2.0 SCOPE

This TIP covers receipt of the specimens at LLNL from the vendor, storage of the specimens before and after testing, and handling during post-test analysis.

The identification and control of the specimens during storage, testing, and analysis is covered by TIP-CM-01, "Accounting of Test Specimens for Long-Term Corrosion Testing," which satisfies the requirements of LLNL YMP procedure 033-YMP-QP 8.0, "Identification and Control of Items, Samples, and Data."

At the completion of the activity, the specimens will be stored in their protective packaging for at least one year or until it has been decided by the TAL that storage is no longer warranted.

3.0 RESPONSIBILITIES

The Principal Investigator (PI) or designee is responsible for:

- the conduct of the activities and methods described in this procedure,
- maintaining scientific notebooks.

The Task Leader (TL) is responsible for:

- assuring that the requirements of this procedure are implemented.

The Technical Area Leader (TAL) is responsible for:

- verifying that this procedure meets the objectives of the applicable Scientific Investigation Plans and other project planning documents such as Activity Plans.

The YMP Quality Assurance Manager is responsible for:

- monitoring the implementation and for assuring the continuing effectiveness of the applicable controls.

4.0 PROCEDURES

4.1 Receipt of specimens at LLNL

- LLNL Shipping and Receiving will be instructed to notify the PI or designee upon receipt of shipping packages

- the PI or designee will assist in acceptance of the specimens and ensure that they are handled properly
- specimen identification numbers will be verified for agreement with procurement document specifications
- verify that materials specification documentation is received with specimens
- specimens that do not meet the requirements of the purchase requisition will be identified and segregated in accordance with LLNL YMP procedure 033-YMP-QP 15.0, "Nonconforming Items"
- receipt of the specimens will be documented in the scientific notebook

4.2 Specimen storage before testing

- specimens will be stored in a locked cabinet (e.g., Stanley-Vidmar type cabinet) in reasonable proximity to the testing area
- keys to the cabinets will be limited to LLNL YMP personnel involved with the activity
- at the PI's discretion, specimens may remain in their protective shipping packages prior to preparation for testing or they may be repackaged in another protective package

4.3 Specimen storage after testing and in-between analysis

- specimens will be stored in a locked cabinet (e.g., Stanley-Vidmar type cabinet) in reasonable proximity to the testing area
- each specimen after removal from testing and in-between post-test analysis will be placed in its own inert protective packaging
- if the identification number has been obscured by corrosion product, a label with the specimen ID # will be attached
- specimen will be stored so as not to be damaged or contaminated

4.4 Handling and storage during analysis

- specimens will remain in their protective packaging whenever they are not being analyzed
- if analysis of a specimen requires that it be sectioned, the pieces of the specimen will be placed in labeled separate storage packages after analysis
- specimens will be returned to the storage cabinet immediately after completion of analysis
- specimens will be handled so as not to be unintentionally damaged or contaminated (e.g., gloves will be worn during handling)

5.0 TRAINING

Personnel responsible for handling of the specimens for Activity E-20-50 will be trained to this TIP.

6.0 APPLICABLE SPECIMENS

This TIP applies to those specimens that were procured for Activity E-20-50, "Long-Term Corrosion Studies."

7.0 SPECIMEN STORAGE

The specimens will be stored in packaging that protects them from damage and contamination. The shipping packages from the vendor are adequate until the specimen are to be prepared for testing. After testing, plastic bags that protect the specimens from the atmosphere (primarily moisture) will be used.

When not in testing or analysis, the specimens will be stored in locked cabinets (e.g. Stanley-Vidmar type cabinets).

8.0 QUALITY SURVEILLANCES

Periodic surveillances to verify that the requirements of the TIP are being implemented shall be performed.

9.0 QUALITY ASSURANCE RECORDS

The following are retained as Lifetime Quality Assurance records:

- scientific notebooks
- materials specification documentation from vendor

10.0 ASSOCIATED ACTIVITY AND TIPS

This TIP is written in association with Activity E-20-50, "Long-Term Corrosion Studies."
A companion TIP for identification and control of the specimens is TIP-CM-01, "Accounting of Test Specimens for Long-Term Corrosion Testing."